World Journal of Pharmaceutical and Life Sciences
WJPLS
www.wjpls.org
SJIF Impact Factor: 5.088

UNDERSTANDING THE COPING STRATEGIES AND ATTITUDE OF PATIENTS WITH PSORIASIS TOWARDS THEIR APPEARANCE

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Article Received on 07/06/2018 **Article Revised on 28/06/2018** **Article Accepted on 19/07/2018**

ABSTRACT

Background: Psoriasis is noted to have psychiatric and psychological co morbidity with its progression. It is essential to understand the Psychological aspects of patients who have chronic dermatological conditions like psoriasis. **Objectives:** To assess the coping strategies, attitude towards appearance among patients with Psoriasis when reporting to large tertiary care centre. **Method:** It was a cross-sectional, hospital based study, of 50 Psoriasis patients in a tertiary care hospital with 50 normal study group. Psoriasis area severity index (PASI) scales were applied to assess severity of skin lesions. Attitude to appearance (ATT) and Brief COPE scale were applied to assess perfectionist attitude and coping respectively. Hamilton Rating Scale for Anxiety (HAM-A) and Hamilton Rating Scale for depression (HAM-D) scales were applied to assess correlation of Anxiety and depression with above variables. **Results:** Psoriasis patients used mainly planning and venting coping strategies. Psoriasis patients were using coping especially more maladaptive emotion-focused coping. Significant positive correlations were found between anxiety (HAM-A), depression (HAM-D, BDI) and coping (Brief COPE) in patients with Psoriasis. **Conclusion:** The evidence of anxiety and depression in patients with psoriasis warrants a psychiatric workup and evaluation in such patients as deemed fit by treating dermatologist. It indicates a need for regular psychological assessment of these patients.

KEYWORDS: Coping, appearance, Psoriasis, Anxiety, depression, attitude.

INTRODUCTION

Psoriasis is an autoimmune disease which runs a chronic course and is characterized by patches of abnormal skin.[1] These skin patches can be typically red, itchy, and scaly.[2] Psoriasis varies in severity from small, localized patches to completely covering the body.[3] There are five main types of psoriasis: plaque, guttate, inverse, pustular, and erythrodermic.[4] Plaque psoriasis, also known as psoriasis vulgaris, makes up about 90 percent of cases.[5] It typically presents as red patches with white scales on top.[5] Areas of the body most commonly affected are the back of the forearms, shins, navel area, and scalp.[6] Guttate psoriasis has drop-shaped lesions.[6] Pustular psoriasis presents as small non-infectious pus-filled blisters.[7] Inverse psoriasis forms red patches in skin folds.[7] Erythrodermic psoriasis occurs when the rash becomes very widespread, and can develop from any of the other types.[7] Fingernails and toenails are affected in most people with psoriasis at some point in time.[8] This may include pits in the nails or changes in nail color.[4]

Psoriasis being a common, chronic, disfiguring, inflammatory and proliferative condition of the skin that affects about 0.1% to 11.8% population it has hazardous influence on the mental health of the patient.[1] These patients are noted to anxious, depressed, engage in excessive worrying, restricted in everyday life as a result of their disease.[2,34] These patients know that this illness has a deep emotional, physical and social impact on their quality of life. Stigmatization and difficult treatment contribute to the patients' high levels of frustration and low self-esteem.[09-10] In patients with Psoriasis the impaired physical and mental functioning was comparable to that seen in cancer, arthritis, hypertension, heart disease, diabetes, and depression. They also believe that the impact of this disease is still underestimated by health professionals.[16]

Psoriasis patches can range from a few spots of dandruff-like scaling to major eruptions that cover large areas.

Most types of psoriasis go through cycles, flaring for a few weeks or months, then subsiding for a time or even going into complete remission.

It has been suggested that patients with moderate-to-severe psoriasis from low self-esteem, poor body image,

and experience constriction of activities and social isolation.[11] As part of the emotional impact increased levels of anger, frustration, depression and anxiety are also observed.[12] While neither life threatening nor physically debilitating these can take sufficient toll on persons self esteem.

Coping is the cognitive and behavioral efforts used by a person to face stress.[12] The word *coping* has no literal translation into Portuguese, but its approximate meaning is to deal with or to face a problem. The different ways to deal with stressful situations are deliberate actions learned, used or discarded. Over the course of time these behavior pattern become repeated and the individual may not be aware of these. This reaction of mobilizing natural resources aims to maintain the balance in the body, decreasing the response to distress.[11,12] Coping strategies are strongly associated with the regulation of emotion, especially anxiety, throughout the disease period. Emotional stress has been shown to exacerbate chronic dermatitis and can initiate a vicious cycle.[11]

Skin, the largest organ of body, plays an essential role, since one of its functions is to represent the individual as unique human being. It is commonly suggested that individuals whose appearance significantly deviates from the perceived norm have a more defined sense of self, leading to a greater pressure to comply with social standards. This pressure has important ramifications, affecting relationships, hobbies, quality of life as well as career aspirations.

Although previous researches indicate that there is a strong connection between psychosocial distress experienced by the patient and skin disorders.[12]

Only limited amount of psychosocial research on Psoriasis is available, specially investigating attitude towards appearance, coping strategies in psoriasis are rare.

Psoriasis both are common, chronic, non life threatening conditions with unsatisfactory treatments, having long term complication and significantly affect the psychological well being of the person therefore present study was aimed at assessing and understating the coping strategies and attitude towards appearance of patients with Psoriasis.

METHODOLOGY

Participants

It was a cross-sectional and hospital based study conducted at tertiary psychiatric hospital. Samples were recruited from the out-patients dermatological department of another tertiary care hospital. After obtaining research ethics committee approval, written informed consent was taken following complete description of the study. Samples were collected by systematic sampling. The sample size is 100 which consists of 50 Psoriasis and 50 people who had no dermatological skin disease. The group included individual aged between 16-50 years, with at least primary level of education. Males consitituted 36 of cases and females were 14 in number. Diagnosis of skin diseases were made according to International classification of diseases (ICD-10). Patients with known psychiatric disorders were excluded.

Assessment

The instruments used for the assessment of the selected variables were:

1. Socio-demographic and clinical data sheet

A specially designed semi-structured Performa, included various socio-demographic variables (age, sex, education, religion, residence, marital status, socioeconomic status) and clinical variables (clinical diagnosis, the age of onset, duration of illness, treatment details) were applied.

2. Psoriasis Area and Severity Index (PASI).

This scale is used to assess the skin area involved and the severity of the dermatological illness. Area coverage is for head, trunk, upper limbs and lower limbs corresponding to 10, 20, 30 and 40 % of the total body area respectively. Severity assessment is done along a 0-4 scale (0-no lesion, 4-severest possible lesion) for the three target symptoms of erythema, infiltration and desquamation. The total PASI score, ranging from 0 to 72; 0-3 for mild, >3-15 for moderate and >15-72 for severe Psoriasis.

3. Attitude to Appearance scale (ATT).

This scale measures attitude to appearance using semantic differentials based on the dysfunctional attitude scale of Beck (1976). Agreement with items 1, 3 and 5 and disagreement with items 2 and 4 has given positive scores. An overall score calculates by adding the scores for each section, ranges from 0 to 5. A higher score indicates a more perfectionist attitude.

5. Brief Cope Scale.

It is one of the most frequently used self-report measures of coping responses. It consists of 28 items, which assesses 14 areas like Self-destruction, Active coping, Denial, Substance use, Use of emotional support, Use of instrumental support, Behavioral disengagement, Venting, Positive reframing, Planning, Humor, Acceptance, Religion, Self-blame. These 14 areas are clubbed into problem-focused coping, adaptive emotion-focused coping, and maladaptive emotion-focused coping. It is a four-point scale, scored from 1-4 with responses of "I haven't been doing this at all, I've been doing this a little bit, I've been doing this in a medium amount, I've been doing this a lot".

6. Hamilton Rating Scale for Anxiety (HAM-A)

The HAM-A probe 14 parameters (items) and takes 15-20 minutes to complete the interview and score the results. Each parameter (item) defined by a series of

symptoms and measures both psychic anxiety and somatic anxiety.

7. Hamilton Rating Scale for Depression (HAM-D).
The HAM-D form lists 21 items; the scoring is based on the first 17. It generally takes 15-20 minutes to complete the interview and score the results. It is the most commonly used measure of depression.

Procedure
After making diagnosis of Psoriasis by dermatologist in dermatological out-patient department, relevant socio-demographic and clinical data were applied on both the groups. For assessing the severity of the skin disorder Psoriasis area severity index (PASI) was applied on Psoriasis by the the author. Then Brief cope, ATT, HAM-A, HAM-D were applied on both the sample groups.

Statistical Analysis
Data was analyzed using Statistical Packages for Social Sciences (SPSS Version 22). Descriptive statistics was used to define the sample characteristics. For testing the variance chi-square, independent t-test, Mann Whitney U test were used. Pearson Correlation was done to assess the correlation between clinical variables across study groups.

RESULTS

The results were tabulated as given below for the study

Table 1: Sociodemographc profile based on religion.

Religion	Psoriasis Cases N=50	Normal N=50
Hindus	42	36
Sikhs	03	10
Muslims	05	04

Table 2: Profile based on marital status.

Marital status	Psoriasis Cases N=50	Normal N=50
Married	29	32
Unmarried	21	18

Table 3: Profile based on socio economic background.

	Psoriasis Cases N=50	Normal N=50
Rural	19	22
Urban	31	28

Table 4: Profile based on Educational status.

	Psoriasis Cases N=50	Normal N=50
<12	34	24
>12	16	26

Table 5: Pasi Score.

Pasi Score	Psoriasis Cases N=50	Normal N=50
0-3 Mild	14	0
>3-15 Moderate	27	0
>15-72 Severe	09	0

Mean PASI score was 8.60±6.55 in patients with Psoriasis

Table 6: BDI score.

BDI	No of cases (n=50)	No of controls (n=50)
0-9	18	48
10-18	22	02
19-29	07	00
>29	03	00
Chi^2 Value = 0.8112	**DF = 3**	**p-value = 0.8473**

Table 7: Coping styles in Psoriasis.

COPE BREF	Gender			
	Male (n = 36)		Female (n = 14)	
	Mean	SD	Mean	SD
Self distraction	3.13	1.45	3.00	1.51
Active coping	3.87	1.84	4.41	1.97
Denial	2.64	1.37	2.99	1.50
Subs abuse	2.24	0.89	2.31	1.10
Emotional support	4.96	1.68	5.43	1.59
Instrumental support	4.15	1.43	4.38	1.57
Behavioral disengagement	3.19	1.91	3.20	1.84
Venting	2.88	1.33	3.01	1.10
Positive reframing	3.65	1.71	3.99	1.83
Planning	2.77	1.00	2.93	1.32
Humor	2.24	0.59	2.17	0.47
Acceptance	4.65	1.70	4.61	1.78
Religion	5.50	2.04	5.57	2.12
Self blame	2.50	1.24	2.34	1.27

Table 8: Gender differences in Coping styles in Psoriasis.

COPE BREF	Gender				P value
	Male (n = 218)		Female (n = 166)		
	Mean	SD	Mean	SD	
Self distraction	3.13	1.45	3.00	1.51	0.402
Active coping	3.87	1.84	4.41	1.97	**0.007***
Denial	2.64	1.37	2.99	1.50	**0.019***
Subs abuse	2.24	0.89	2.31	1.10	0.475
Emotional support	4.96	1.68	5.43	1.59	**0.006***
Instrumental support	4.15	1.43	4.38	1.57	0.144
Behavioral disengagement	3.19	1.91	3.20	1.84	0.956
Venting	2.88	1.33	3.01	1.10	0.291
Positive reframing	3.65	1.71	3.99	1.83	0.067
Planning	2.77	1.00	2.93	1.32	0.190
Humor	2.24	0.59	2.17	0.47	0.237
Acceptance	4.65	1.70	4.61	1.78	0.837
Religion	5.50	2.04	5.57	2.12	0.753
Self blame	2.50	1.24	2.34	1.27	0.222

(2 independent sample t-test used)

As depicted in Table no. 7, females had significantly higher scores in active coping, denial and emotional support as compared to males.

The demographic profile of Psoriasis patients was: married (58%), Hindu (84%), rural (38%), education above 12th (32%) and mean age was 28.24±7.15 years. This profile was statistically similar to normal control group (Table 1, 2, 3). The severity of skin lesions by using PASI scores respectively showed that the majority of Psoriasis patients were moderate in severity (54%) Mean PASI score was 8.60±6.55 in patients with Psoriasis (Table 4). The mean duration of illness was 49.84±50.62 months in Psoriasis. There was no statistically significant difference in terms of duration of illness and attitude towards appearance. Mean attitude to appearance score in Psoriasis patients was 3.36±1.14 in comparison to 3.16±1.14 in normal group.

In the current study statistically significant difference found in coping (p=.00) with higher scores for Psoriasis. Mean brief cope score for Psoriasis patients was 40.04±6.98 in comparison to 35.04±4.46 in normal group. There was no significant difference in active coping, Substance use, use of emotional support, Humor, Acceptance between both groups, but significant difference found in Self-distraction, Denial, use of instrumental support, Behavioral disengagement, Venting, Positive reframing, Planning, religion and Self-blame. Higher scores are found in Psoriasis patients in terms of Self-distraction, Denial, Behavioral disengagement, Venting, Planning, religion, Self-blame than normal group In Psoriasis patients most frequently used coping strategies were planning and venting and least common were substance use and humor. In normal group most frequently used coping strategies were used of instrumental support and Positive reframing and least common were substance use and self-blame.

Significant positive correlations found between coping (Brief COPE) and anxiety (HAM-A), depression (HAM-D, BDI) in Psoriasis and between coping (Brief COPE) and depression (BDI) in normal group. Attitude towards appearance (ATT) and anxiety (HAM-A) in Psoriasis patients were also significantly correlated. (Table 3 & 4).

DISCUSSION

The Socio-demographic profile of Psoriasis patients was statistically similar to the comparable group except in marital status. In normal group significantly more were unmarried in comparison to Psoriasis.

In the current study majority (54%) of Psoriasis patients were moderate in severity in PASI scale. In both groups, disease-specific scales were applied to assess the severity of skin lesions, therefore, a severity of skin lesions were not directly comparable in both the groups.

In Psoriasis patients, most frequently used coping strategies were planning and venting. Psoriasis patients keep planning to get rid of this disease probably due to their change in physical appearance and discomfort because of excessive shedding of scales. Venting is another coping strategy commonly used by Psoriasis patients. They have a negative feeling inside themselves as it a chronic disease, affects the quality of life of both patients and their close relatives in a cumulative way.[13] The chronic nature of the disease and the lack of control over unexpected outbreaks of the symptoms are among the most bothersome aspects of Psoriasis.[13] Similar to current findings Fortune et al.[14] reported that the coping strategies most frequently employed by patients with Psoriasis were planning, active coping, acceptance, and positive reinterpretation. In Finzi et al.[15] study planning and active coping were the most frequently employed coping strategies by Psoriasis patients. The most frequently used coping strategies in dermatological

outpatients were planning / activity, positive attitude and social support / venting of emotion, while turning to religion and avoidance strategies were the least commonly used.[13]

Table 6 & 7 revealed the Coping strategies in Psoriasis patients. The four most frequently used coping strategies by male patients were religion (M = 5.50, SD = 2.04), use of emotional support (M =4.96, SD =1.68), acceptance (M = 4.65, SD = 1.70), and instrumental support (M = 4.15, SD = 1.43), whereas the least common coping strategies were substance use (M =2.24, SD =0.89), humor (M = 2.24, SD =0.59) and self blame (M = 2.50, SD = 1.24).

Similarly, the four most frequently used coping strategies by female patients were religion (M = 5.57, SD = 2.12), use of emotional support (M =5.43, SD =1.59), acceptance (M = 4.61, SD = 1.78), and active coping (M = 4.41, SD = 1.97), whereas the least common coping strategies were humor (M = 2.17, SD = 0.47), substance use (M =2.31, SD = 1.10) and self blame (M = 2.34, SD = 1.27).

Other studies had found that religious coping improves personal control and self esteem.[19] Emotional support, acceptance, and active coping were the most frequently used coping strategies as noted in others.[20]

In this study, females more frequently used emotional support (M =5.43, SD =1.59 vs. M =4.96, SD =1.68, p value- 0.006), active coping (M =4.41, SD = 1.97 vs. M =3.87, SD =1.84, p value- 0.007) and denial (M = 2.99, SD = 1.50 vs. M = 2.64, SD =1.37, p value- 0.019) as coping styles compared to males. Matud et al also reported that coping styles in females are more emotion-focused than that of men.[13]

In the comparison of different coping strategies, significantly higher scores for Psoriasis in terms of self-distraction, denial, behavioral disengagement, venting, planning, religion, self-blame and higher scores for normal group in terms of instrumental support and positive reframing. Denial, mental and behavioral disengagement, venting, substance use and self blame are maladaptive emotion focused coping strategies.[12,13] In current study Psoriasis patients were using significantly more maladaptive emotion-focused coping strategies like denial, behavioral disengagement, venting, self blame in comparison to normal group. The maladaptive approach is usually associated with worse outcomes than adaptive or problem focused approach.[12] In females, maladaptive coping/rumination were more strongly related to depressive symptoms in the presence of lower levels of adaptive coping.[13]

More coping had been used by Psoriasis patients, maladaptive coping. The reason for using more coping in Psoriasis is probably its more chronic and discomforting nature. Porter et al.[16] reported that Psoriasis patients suffer more social discomfort and job discrimination compared with patients suffering from other skin disorders. Patients may feel humiliated when they need to expose their bodies during intimate relationships, swimming, using public showers, or any conditions that do not provide adequate privacy. Walker et al[19] suggested that distorted body image in Psoriasis is associated with problems in self-perception as a desirable sexual being and disrupted intimate relationships.

Gupta and Gupta[8] found that fear of negative evaluation have been reported to be higher in Psoriasis compared with Atopic Dermatitis, contact dermatitis, and Acne. The patients who believe Psoriasis has a negative effect on their sexual lives have more symptoms of depression.[15] These all studies support the findings of the present study, as the factors mentioned above may affect coping in psoriasis patients.

In the current study majority of Psoriasis patients were in agreement in 5 point scale of Attitude to appearance (ATT) scale. This means they are concern about their appearance, having high perfectionist attitude. Psoriasis patients had more perfectionist attitude than normal group but this difference was not significant. ATT score in the present study is comparable with Mattoo et al.[18] study and higher than Wessely & Lewis study.[17] The Higher perfectionist attitude in comparison to Wessely & Lewis[17] is probably due to increased awareness for appearance among the general population in comparison to past. Feingold reported significant relationship between attractiveness and measures of mental health, social anxiety, popularity, and sexual activity. Walker et al.[19] found that attractive children and adults were judged and treated more positively than unattractive children and adults, even by those who know them and they exhibited more positive behaviors and traits than unattractive children and adults.

Significant positive correlation found between depression, anxiety and coping in Psoriasis patients and; none in normal group patients. Means patients having depression or anxiety use more coping. Skin disease patients with depression or anxiety remain in more stress and in reaction to stressful situation they use more coping. People's coping responses to threats and stressors are key determinants of their psychological adjustment and well-being.[20] We could not find studies related to this finding. We found significant positive correlation between perfectionist attitude and anxiety in Psoriasis patients, but it was not observed in normal group. Wessely & Lewis[17] study concluded that Self-report measures of the behavioral impact of skin disease and attitude towards appearance were related to psychological morbidity in mixed dermatological patients. Further studies are needed to elucidate this association.

We conclude that Psoriasis patients used mainly planning and venting coping strategies and normal group used

mainly instrumental support and positive reframing. Psoriasis patients use more coping in comparison to normal group. They use more maladaptive emotion focused coping including denial, behavioral disengagement, venting, self-blame. There is positive correlation found between depression, anxiety and coping.[21] Perfectionist attitude and Anxiety are positively correlated in Psoriasis patients. Limitations of our study are modest sample size and no control group.

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